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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

DOERRLER, WILLIAM CHARLES

ART UNIT	PAPER NUMBER
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3744

DATE MAILED: 11/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/059,826

Applicant(s)

ASSAF, GAD

Examiner

William C Doerrler

Art Unit

3744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other:

DETAILED ACTION

Reissue Applications

The original patent, or a statement as to loss or inaccessibility of the original patent, must be received before this reissue application can be allowed. See 37 CFR 1.178.

Claims 29-47 are rejected under 35 U.S.C. 251 as being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based. See *Hester Industries, Inc. v. Stein, Inc.*, 142 F.3d 1472, 46 USPQ2d 1641 (Fed. Cir. 1998); *In re Clement*, 131 F.3d 1464, 45 USPQ2d 1161 (Fed. Cir. 1997); *Ball Corp. v. United States*, 729 F.2d 1429, 1436, 221 USPQ 289, 295 (Fed. Cir. 1984). A broadening aspect is present in the reissue which was not present in the application for patent. The record of the application for the patent shows that the broadening aspect (in the reissue) relates to subject matter that applicant previously surrendered during the prosecution of the application. Accordingly, the narrow scope of the claims in the patent was not an error within the meaning of 35 U.S.C. 251, and the broader scope surrendered in the application for the patent cannot be recaptured by the filing of the present reissue application.

Claims 29 and 30 are substantially the same as patented claims 1 and 2 with the exception of specifying that the units are substantially identical and that the heat exchanger is "a forced-air counter-flow" heat exchanger. The forced air counter flow limitation was made in the final amendment of the parent case and resulted in the allowance of the case. Thus the elimination of the structure results in impermissible

Art Unit: 3744

recapture of the original claims. None of the dependent claims listed above (31-47) reintroduce the counter-flow language, so they are seen as also improperly trying to recapture lost subject material.

The reissue oath/declaration filed with this application is defective (see 37 CFR 1.175 and MPEP § 1414) because of the following:

The declaration does not mention the claim for foreign priority which was granted in the parent.

Claims 1-49 are rejected as being based upon a defective reissue declaration under 35 U.S.C. 251 as set forth above. See 37 CFR 1.175.

The nature of the defect(s) in the declaration is set forth in the discussion above in this Office action.

Response to Amendment

The 1-30-2002 preliminary amendment has been entered for the purposes of examination. However, it does not comply with 37 CFR 1.173 and must be submitted in proper format. See MPEP 1453.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 43-47 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to

Art Unit: 3744

reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 43 claims a "heat pump system as claimed in claim 29 and further including a refrigerant evaporator and a refrigerant condenser". Claim 29 claims brine/refrigerant heat exchangers which are connected through a compressor. Thus applicant's claim 43 claims a system with refrigerant/brine heat exchangers which are connected to a compressor AND a refrigerant evaporator and compressor. This is not disclosed in applicant's disclosure which uses a refrigerant evaporator and condenser (which are both attached to a compressor) to transfer heat from (and to) the brine solution. Claims 44-47 depend from claim 43, so they are rejected due to their dependency.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 36 and 37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In line 2 of claim 36, "said second and third heat exchangers" lack clear antecedent basis. The same is true of "said second heat exchanger in line 3 of claim 37.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

Art Unit: 3744

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 29-32,37,38,43-45, 48 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGrath in view of Rhodes.

McGrath discloses applicant's basic inventive concept, a heat pump system having two units (42 and 43), each in a housing and having an air/brine heat exchanger (47,45), which have brine sprayed over them and refrigerant/brine heat exchangers (49 and 51) which are connected to a compressor, substantially as claimed with the exception of circulating the refrigerant in selected directions. Rhodes shows this feature to be old in the desiccant assisted vapor compression system art. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention from the teaching of Rhodes to modify the cooling system of McGrath by enabling the reversal of the refrigerant flow to enable regeneration of the desiccant while the device continues to function.

Claims 29-33,36,37,43-45, 48 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson in view of Rhodes.

Peterson discloses applicant's basic inventive concept, a heat pump system having two units, each in a housing and having an air/brine heat exchanger, which have brine sprayed over them and refrigerant/brine heat exchangers (with the refrigerant exchanging heat with the brine simultaneously with the air) which are connected to a compressor, substantially as claimed with the exception of circulating the refrigerant in selected directions. Rhodes shows this feature to be old in the desiccant assisted vapor compression system art. It would have been obvious to one of ordinary skill in the art at

Art Unit: 3744

the time of applicant's invention from the teaching of Rhodes to modify the cooling system of Peterson by enabling the reversal of the refrigerant flow to enable regeneration of the desiccant while the device continues to function.

Allowable Subject Matter

Claims 1-28 would be allowable if the declaration problems are corrected.

Claims 34,35 and 39-42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and a proper declaration is submitted.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bauman and Kelley '376 show cooling systems with desiccant assistance.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C Doerrler whose telephone number is (703) 308-0696. The examiner can normally be reached on Monday-Friday 6:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Denise Esquivel can be reached on (703) 308-2597. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

Art Unit: 3744

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.

A handwritten signature in black ink, appearing to read "William C Doerrler". The signature is fluid and cursive, with the first name "William" and last name "Doerrler" clearly distinguishable.

William C Doerrler
Primary Examiner
Art Unit 3744

WCD
November 13, 2002